

723-4210

789-4210

2007 EMPRESS OF THE NORTH GROUNDING CHECKLIST

Vessel Data.

- ✓(1) Name; *EMPRESS OF THE NORTH*
- ✓(2) O.N.; *1140867*
- ✓(3) Operator/owner; *Majestic American Line*
- ✓(4) When/where built;
- ✓(5) When/where last inspected (COI); *17 Feb 07, Portland OR*
- (6) When/where last drydocked;
- (7) Load Line and other certificates;
- ✓(8) Logs (official, ✓engine room, ✓deck, etc.);
- ✓(9) Type of vessel; *PA*
- ✓(10) Length/depth/breadth; and
- ✓(11) Gross tonnage;

b. Weather Data.

- (1) State weather prior to and at the time of the casualty;
- (2) Wind direction and velocity;
- (3) Sea state;
- (4) Visibility;
- ✓(5) Daylight (dark) or twilight (if not apparent); and
- (6) Sea temperature.

c. Voyage Data. *VIDE data*

- ✓(1) Date and place voyage began;
- ✓(2) Port of last departure and next port of call; *Haines / Sitka via Glacier Bay*
- ✓(3) Amount and nature of cargo (cargo diagram); *fuel summary*
- ✓(4) Draft on departure and estimated draft at the time of the casualty;

L7?

(5) Any significant occurrences during the voyage that may have had an effect on the casualty; and

(6) Position of the casualty and how determined.

d. Human Factors. A high percentage of casualties are due to human error. However, quite frequently I.O.'s fail to document the underlying reasons why the human error occurred. To provide a better understanding of these causes, a description of the human factors should be set forth in the facts. The following guide indicates some of the factors to be investigated and included in the facts, as applicable:

(1) Equipment design, adequacy, and performance;

(2) Crew training and experience:

(a) General;

(b) Equipment specific;

(c) Environment specific;

(d) Rules and regulations; and

(e) Company policies;

(3) (In)sufficiency of personnel;

(4) Fatigue;

(5) Use of drugs or alcohol, including prescription medication;

(6) Physical qualifications;

(7) Calculated risk; and

(8) Management controls:

(a) Rules and regulations;

(b) Company policies; and

(c) Operational commitments.

Groundings.

a. Causes. Some common causes of groundings in open water include errors in navigation, misreading of charts, misjudgment of set, failure to take soundings, failure to post proper lookouts, failure to use all navigational aids, missing or inaccurate magnetic deviation tables, and failure to compare gyro and magnetic compasses. In restricted waters, common causes include reliance upon buoys to the exclusion of other

- (g) Chart(s) used. *HAVE IN POSSESSION*
- (h) Coast Pilots. *ON BOARD*
- (i) Sailing directions: *YES / STANDING ORDERS*
- (i) Local instructions; and
- (ii) Required or suggested routing. *YES SEE CHART*
- (j) Notices to Mariners. *YES LAST UPDATE 19/07*
- (k) Standing orders and night orders. *YES*
- (l) Bell books (deck, engine room). *NO*
- (m) Logbooks (deck, engine room).
- (n) Steering gear/automatic pilot. *OK*

(2) Events Leading Up To The Grounding (Open Waters).

- (a) Last position or fix:
 - (i) Time; and
 - (ii) Subsequent lines of position (LOP's), estimated positions (EP's), and dead reckonings (DR's).
- (b) Courses and speeds from last position:
 - (i) Times of changes; and
 - (ii) Allowances for set and drift.
- (c) Visibility.
- (d) Wind from last position:
 - (i) Direction; and
 - (ii) Force.
- (e) Sea conditions from last position:
 - (i) Swells (amount and direction); and
 - (ii) Current and tide.
- (f) Aids to navigation seen or heard.
- (g) Equipment failures, if any.

means of checking position, bank suction/cushion effect, and lesser depth of water than anticipated due to abnormally low tides or silting. Yet other groundings can be ascribed only to calculated risk that failed.

b. Vessel Stresses From Groundings. Groundings, regardless of cause, may subject a vessel to unusual stresses that are not readily visible. The I.O. must be alert to any indications that the vessel's seaworthiness has been adversely affected by the grounding. In this regard, the SIM should be informed of all groundings and strandings involving U.S. inspected vessels, so that structural examinations can be arranged.

c. Investigative Reports Of Grounding. These should include a description of the angle of impact, speed at the time of impact, and the depth of penetration. Also, in casualties due to grounding or other damage resulting in holing and flooding of compartments, where available and appropriate, the following information shall be made a part of the report:

- ✓ (1) Draft leaving port, forward and aft; 10.6 12.8
- (2) Draft at time of casualty, forward and aft (best estimate); UNKNOWN
- (3) Draft after casualty, forward and aft (if appropriate);
- ✓ (4) General location of damage; Stbd side, mostly fwd of centerline
- ✓ (5) Compartments affected; VOIDS 1-4, 2-DECK, 1 STARBOARD FO TANK
- ✓ (6) Number and size of openings; 5 OPENINGS 8' x 1 1/2 INCH
- ✓ (7) Extent of damage: longitudinal, inboard, and vertical (information should be sufficiently detailed to define fully the extent of damage); and SEE BERT'S NARRATIVE
- (8) Behavior of vessel: list, trim, did vessel sink/time to sink. N/A

d. Grounding Checklist.

(1) Navigation Gear. Determine type(s), condition, and whether or not in use, as appropriate.

- (a) Radar. ✓
- (b) LORAN. ✓
- (c) RDF. ✓
- (d) Sounding device(s). ✓
- (e) Compass(es). ✓
- (f) Course recorder. ✓

(h) Personnel on watch:

(i) Deck (pilot, master, mates, lookouts, etc.); and

(ii) Engineroom.

(i) Grounding:

(i) Time;

(ii) Position (how determined); and

(iii) Depth.

(3) Events Leading Up To The Grounding (Restricted Waters).

(a) Last position(s):

(i) How determined; and

(ii) Times.

(b) Courses and speeds/times of changes.

(c) Visibility.

(d) Sea conditions (tide and current).

(e) Winds:

(i) Direction; and

(ii) Force.

(f) Aids to navigation seen or heard.

(g) Deck personnel on watch (pilot, master, mates, lookout, helmsman, etc.).

(h) Standby conditions set.

(i) Traffic.

(j) Equipment failures.

(k) Anchor(s) used.

(l) The grounding:

(i) Time;

(ii) Position (how determined);

- (iii) Depth (stage of tide); and
- (iv) Channel (width and depth).

(4) Events After Grounding.

- (a) Part of vessel aground;
- (b) Maneuvers or method adopted to free vessel;
- (c) Assistance rendered;
- (d) Length of time aground;
- (e) Soundings of compartments;
- (f) Extent of damage to vessel and cargo;
- (g) Temporary repairs;
- (h) Temperature of water, if vessel abandoned;
- (i) Lifesaving equipment used;
- (j) Commendatory acts; and
- (k) Survivors' recommendations.

WHAT WERE YOU DOING JUST PRIOR TO THE GLANDING?

AT TIME OF GLANDING?

WERE YOU AWARE OF ANY MECHANIC PROBLEMS PRIOR TO
J-CURVE?

WHAT HAPPENED FROM YOUR VIEWPOINT?

WHAT DID YOU DO?

WHAT LIFE SAVING MEASURES WERE YOU INVOLVED IN?

IS THERE ANY INFORMATION THAT YOU THINK YOU SHOULD
KNOW?

IS THERE ANYTHING THAT YOU KNOW OR THAT COULD
HAVE PREVENTED THIS FROM OCCURRING.